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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,228	11/01/2000	Dale Obeshaw	DP-300398	2389

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Delphi Automotive Systems Legal Staff  
Amy C Downey  
Mail Code 480 414 420  
1450 West Long Lake 4th Floor  
Troy, MI 48098

EXAMINER

ZIMMERMAN, JOHN J

ART UNIT	PAPER NUMBER
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1775

19

DATE MAILED: 10/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/704,228

Applicant(s)

OBESHAU, DALE

Examiner

John J. Zimmerman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-33 and 36-38 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7-9,11-13,15-23,34,35 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 3, 5, 6, 10, 24-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## OFFICE ACTION

### *Amendments*

1. The Amendment and Request for Reconsideration received September 25, 2002 has been entered. Claims 1-13 and 15-41 are pending in this application. Applicant submitted amendments to the claims and arguments in order to overcome the applied art of record. The examiner notes, however, that an updated search of the prior art has been performed and this search has yielded additional references that are pertinent to some of the pending claims. In view of the new rejections set forth in this Office Action, this action will not be made Final.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 7-9, 11, 21-23, 35 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Hagemeister (U.S. Patent 4,699,523).

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4. Hagemeister discloses a contoured structural member comprising an inner section comprising a plurality of contoured layers comprising a metal containing material, an intermediate metal containing ribbed layer and a plurality of contoured outer layers (e.g. see Figure 6). Hagemeister's member is made by wrapping the layers about a shaft, but Hagemeister may not disclose all the same process steps as recited in some of the article claims. When there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Particularly note that in article claims reciting method steps where the shrink wrap is added and removed, the shrink wrap would not be present in the claimed final article.

5. Claim 41 is rejected under 35 U.S.C. 102(b) as being anticipated by Gregg (U.S. Patent 5,451,472).

6. Gregg discloses a contoured structural member comprising an inner section comprising a plurality of contoured layers comprising a metal containing material, an intermediate metal containing ribbed layer and a plurality of contoured outer layers (e.g. see Figure 6).

7. Claims 16 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Herbert (U.S. Patent 2,940,557).

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8. Herbert discloses a contoured structural member comprising an inner section comprising a plurality of contoured layers comprising a metal containing material, an intermediate metal containing ribbed layer and a plurality of contoured outer layers (e.g. see Figure 2 for evidence of multiple inner and outer layers and Figure 6 for evidence of contoured configuration).

9. Claims 34-35 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Frease (U.S. Patent 1,677,714).

10. Frease discloses a hollow contoured structural member comprising contoured inner layers, at least one intermediate wrapped ribbed structure layer and contoured outer layers (e.g. see Figures 1-5). Regarding claim 35, Frease may not disclose the same process steps, but these claims are product claims and not process claims. When there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Particularly note that in claims 35, the shrink wrap is added and removed and therefore would not be present in the claimed final article. Although it is noted that claim 41 requires that the inner and outer layers are "solid", there appears no doubt that at least some of the inner and outer layers of Frease are without internal cavities. Applicant's use of "comprising" opens the claims to additional non-solid layers in addition to the "solid" layers.

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***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 12-13, 15-20 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frease (U.S. Patent 1,677,714), in view of Ohrn (U.S. Patent 6,116,290) and Cappa (U.S. Patent 5,848,767).

13. Frease discloses a contoured structural member comprising at least one ribbed interior layer surrounded by a plurality of inner and outer layers of material. The middle ribbed layer in Figure 3 clearly has several further layers located towards its interior side and several further layers located towards its exterior side. Regarding claims drawn to specific materials, Frease may differ from these claims in that Frease may not disclose specific materials for his contoured structural member. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any conventional materials for the contoured structural member that might be suited to particular structural requirements and particular environments in which Frease's structural member might be useful. Ohrn is applied to clearly show that composite materials and combinations of metal and composite material are indeed conventionally used in pipelines (e.g. see column 1, lines 6-8; column 2, lines 32-38). One of ordinary skill in the art would be able to select the appropriate material combination for specific

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uses depending on the known structural strength, corrosion resistance, economic feasibility and insulation properties associated with the individual metal and/or composite materials. In view of Ohrn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use composite materials in pipes constructed with the intermediate layers as in Frease, because Ohrn clearly discloses that composite materials are conventionally used in pipe construction when their properties (e.g. insulation properties) would be beneficial (e.g. vacuum pipes, line 5 of page 1 of Ohrn). The examiner notes that light metals (e.g. aluminum, titanium, etc. . .), composite materials and stainless steels are conventionally used in structural members where their structural properties, corrosion resistance and economic feasibility would be useful and therefore their use in Frease's structural configuration (e.g. culverts, structural columns, line 6 of page 1 of Ohrn) would have been considered an obvious variation on the disclosure of Frease depending on the structural and corrosion requirements of the structural member.

Regarding claims to specific intermediate layer configurations that may not be illustrated by Frease (e.g. honeycomb cores), the examiner notes that honeycomb configurations are now considered conventional as core configurations that have good load bearing properties. Evidence that honeycomb cores are now conventionally considered obvious for load bearing structures is shown by Cappa (e.g. see Figure 3). Cappa also further confirms the obviousness of using metal and/or composite materials in load bearing structures (e.g. see column 1, lines 55-62 and column 4, lines 5-14). In view of the Cappa, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any conventional core configuration known for load bearing properties for the core of Frease because Frease discloses that this is the purpose of the intermediate layers. Regarding the method claims reciting roll wrapping, the method of

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wrapping layers and using a mandrel is a conventional method of forming laminated tubular structures in the art and would not be a patentable distinction over Frease for forming Frease's contoured structural member. Regarding article claims that recite the method by which the article is made, Frease may not disclose the same process steps, but these claims are product claims and not process claims. When there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Regarding claims reciting an "initiator", any discontinuity in the article (e.g. a joint) may function as an initiator. Regarding claims requiring particular configurations (e.g. bent), pipe are conventionally bent to fit in structures and also to follow terrain and forming a bend in the pipes of Frease would be an obvious variation on Frease's article because it would allow the pipe to be installed in structures and to follow terrain when used outside of structures.

### ***Response to Arguments***

14. Applicant's arguments filed with Amendment and Request for Reconsideration received September 25, 2002 have been fully considered but they are not persuasive with regards to the pending rejections. As noted above, applicant submitted amendments to the claims in order to overcome the applied art of record in the last Office Action. New pertinent prior art references (Hagemeister, Herbert, Gregg), however, have been found in an updated search of the prior art.



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15. Claims 34-35 and 41 remain rejected under 35 U.S.C. 102(b) as being anticipated by Frease (U.S. Patent 1,677,714) since Frease does indeed disclose a contoured structural member comprising at least one ribbed interior layer surrounded by a plurality of inner and outer layers of material. The middle ribbed layer in Figure 3 clearly has several further layers located towards its interior side and several further layers located towards its exterior side.

16. Regarding the rejection of the claims under 35 U.S.C. 103(a) as being unpatentable over Frease (U.S. Patent 1,677,714), in view of Ohrn (U.S. Patent 6,116,290) and Cappa (U.S. Patent 5,848,767), this new rejection has been made to clarify the rational and motivations for one of ordinary skill in the art to use various conventional materials in Frease. The Frease patent has not been applied against claims which require that the inner and outer sections have a continuous plurality of contoured layers since the individual layers of Frease are not continuous with adjacent inner and outer layers.

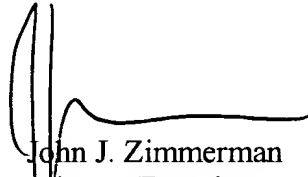
***Allowable Subject Matter***

17. Claims 31-33 and 36-38 are allowable. Claims 3, 5, 6, 10 and 25-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (703) 308-2512. The examiner can normally be reached on 8:30am-5:00pm, M-F. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



John J. Zimmerman  
Primary Examiner  
Art Unit 1775

jjz  
October 29, 2002